



Our Reference: UMJ-102-B (UM1544p1)

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Curtis L. Munson & Ralph T. Yang

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Examiner/Art Group Unit: Unknown/1764

Title: SULFUR RESISTANT ADSORBENTS

COMMUNICATION

Assistant Commissioner of Patents  
Washington, D.C. 20231

Sir:

If any charges or fees must be paid in connection with the following communication, they may be paid out of our Deposit Account No. 25-0115.

Prior to initial examination, please amend the above-identified patent application as indicated below.

In the specification:

Replace the paragraph on page 7, lines 23-25 with:

Fig. 14c is a table showing diffusion time constants (1/s) for 1,3-butadiene and 1-butene before and after H<sub>2</sub>S exposure;

Replace the paragraph on page 7, lines 36-37 with:

Fig. 20 is a graph showing isotherms of 1-butene and 1,3-butadiene after H<sub>2</sub>S exposure.

Page 15, replace the paragraph on lines 1-10 with the following:

H<sub>2</sub>S Adsorption/Desorption on AgNO<sub>3</sub>/SiO<sub>2</sub>

C<sub>3</sub>H<sub>6</sub> has been shown to be readsorbed at 70°C onto a AgNO<sub>3</sub>/SiO<sub>2</sub> adsorbent that was previously exposed to 1 atm of H<sub>2</sub>S. As shown in the earlier graphs, it appears that a substantial portion of the H<sub>2</sub>S desorbs upon lowering the pressure. See Figures 6-8. The "poisoned"

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